

## **ABSTRACT OF THE DISCLOSURE**

Method for managing a battery system including a number of serially coupled batteries in a flexible, reliable, and cost effective way and that can be used in a wide variety of applications, such as tools, for example, hand tools, cars, boats, back-up systems, buses, trucks, golf carts, wheel chairs, electric cars and fork-lift trucks. The method includes the steps of detecting the battery voltage over each individual battery of the battery system; and utilizing a voltage imbalance between different batteries of the system during operation of the battery system. Furthermore, the method controls the voltage distribution of the batteries to create a voltage imbalance between different batteries of the battery system.